performed, and, after the completion of the exposure, the photosensitive film is separated from the polarizing plate surface, and moved for a next processing (In the case of an instant film, a processing liquid tube provided in the film sheet is pushed open).

These procedures must be repeated for each photosensitive film. In particular, separating the photosensitive film from the polarizing plate surface does not square with automation (or mechanization).

Recently, the screens of LCDs have progressed in terms of definition, and LCDs with an increased number of pixels and a smaller dot size are being commercialized. For example, as LCDs using low-temperature polysilicon type TFTs, UXGA (10.4 inches; 1200 x 1600 pixels), XGA (6.3 and 4 inches; 1024 x 768 pixels) are on the market.

An attempt to apply an LCD with such a high-definition screen to the transfer apparatus disclosed in JP 11-242298 A would lead to the following problem. In the case of UXGA, the dot size of each of the RGB pixels is approximately 0.04 mm on the shorter side. In a transfer apparatus as disclosed in the above-mentioned publication, in which enlargement in dot size is involved, it would be impossible to transfer an LCD image of such a minute dot size to a photosensitive film with satisfactory clarity in

a condition in which the dots of the RGB pixels are clearly distinguishable.

SUMMARY OF THE INVENTION

It is an object of the present invention to eliminate the above problems in the prior art and to provide a transfer apparatus which can realize a substantial reduction in size, weight, power consumption, and cost with a simple structure and which can also be formed as a portable device.

Another object of the present invention is to provide a transfer apparatus which is applicable to various types of liquid crystal displays ranging from a liquid crystal display of an ordinary pixel density to a liquid crystal display with a high definition screen having a high pixel density and which makes it possible to obtain a photographic image of a desired degree of clarity, from a photographic image which is satisfactory from the practical point of view to a high-definition photographic image of a higher level of clarity.

To achieve the above objects, the present inventors have conducted careful study on a transfer apparatus which makes it possible to obtain a photographic image of a desired degree of clarity, which is of higher practical

value, and which allows use of a transmission type image display device, such as a liquid crystal display, which has a high-definition screen of a high pixel density in a structure in which the liquid crystal layer is held between two sets of substrates and polarizing plates. As a result of the study, the present inventors have found that, to prevent blurring (unclarity) of the image, which is inevitably generated when bringing the transmission type image display device and the photosensitive recording medium out of contact with each other, that is, when separating them from each other to achieve a higher practical value with a simple structure, it is necessary to set the sum total of the thicknesses of the substrate and the polarizing plate on the photosensitive recording medium side of the transmission type image display device in accordance with the separation distance between the two components.

The present invention provides a transfer apparatus comprising a light source, a transmission type image display device in which a liquid crystal layer is held between two sets of substrates and polarizing plates and a photosensitive recording medium wherein the light source, the transmission type image display device and the photosensitive recording medium are arranged in series